To: Goldmann, Elizabeth[Goldmann.Elizabeth@epa.gov]

From: Leidy, Robert

Sent: Tue 10/27/2015 3:44:10 PM

Subject: FW: FW: question on estimates stormwater runoff from Rosemont Mine site

fyi

From: Douglas, Jason [mailto:jason_douglas@fws.gov]

Sent: Monday, October 26, 2015 4:06 PM **To:** Leidy, Robert <Leidy.Robert@epa.gov>

Subject: Re: FW: question on estimates stormwater runoff from Rosemont Mine site

Rob,

Agency Referral

Jason M. Douglas
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service

Arizona Ecological Services Office

201 North Bonita Street, Suite 141 Tucson, Arizona 85745 (520) 670-6150, extension 226 (voice) (520) 670-6155 (fax) http://www.fws.gov/southwest/es/arizona/

On Mon, Oct 26, 2015 at 3:51 PM, Leidy, Robert < Leidy.Robert@epa.gov > wrote:

Hi again Jason,

I have a quick follow-up question. How did you derive the 0.3-1.0 percent reduction in lower Cienega creek baseflows from the 4.3% reduction in surface flows at the confluence of Davidson Canyon and Cienega Creek?

Thanks, Rob Robert A. Leidy, Ph.D. **Ecologist/Enforcement Officer** U.S. Environmental Protection Agency Wetlands Office (WTR-2-4) 75 Hawthorne Street San Francisco, CA 94105 (415) 972-3463 From: Leidy, Robert Sent: Monday, October 26, 2015 3:41 PM To: jason douglas@fws.gov Cc: Calhoun, Jean < jean_calhoun@fws.gov> Subject: FW: question on estimates stormwater runoff from Rosemont Mine site

Jason,

ED_001040_00012557-00002

I am forwarding you the email chain below wherein I asked Chris Garrett for information regarding the estimated percent reduction in surface flow at the Cienega/Davidson confluence **during the active life of the mine** (est. at 25 years).

Of note is Pg. 266, paragraph 2, of the B.O. in the FEIS that states: Given SWCA's finding that Davidson Canyon Wash will experience a 4.3 percent reduction in surface flow from the placement of tailings in Barrell Canyon (a tributary) (see above), we anticipate a 0.3 to 1.0 percent reduction in lower Cienega Creek baseflows. This 4.3% estimated reduction is post-mine closure. Chris estimates that during the active mine phase (25 years or more) stormwater flow reductions at Davidson/Cienega confluence will be as high as 10.2%. If so, this would significantly increase the percent reduction in lower Cienega Creek baseflows with potential impacts to several species.

Best,
Rob
Robert A. Leidy, Ph.D.
Ecologist/Enforcement Officer
U.S. Environmental Protection Agency
Wetlands Office (WTR-2-4)
75 Hawthorne Street
San Francisco, CA 94105
(415) 972-3463

From: Chris Garrett [mailto:cgarrett@swca.com]
Sent: Tuesday, September 15, 2015 10:16 AM
To: Leidy, Robert < Leidy.Robert@epa.gov >

Cc: Goldmann, Elizabeth < Goldmann. Elizabeth@epa.gov >; Vogel, Mindy S -FS

<msvogel@fs.fed.us>

Subject: RE: question on estimates stormwater runoff from Rosemont Mine site

Hi Rob -

Agency Referral

Agency Referral

Agency Referral

Hope that helps	Hor	e th	at h	elps
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On Sep 3, 2015, at 1:05 PM, Leidy, Robert < Leidy.Robert@epa.gov > wrote:

Hello Chris,

Hope you are doing well. I am hoping that you can help us answer a question regarding stormwater runoff estimates from the proposed Rosemont Mine site as you are most familiar with all of the technical studies.

According to the FEIS (p. 434), the maximum loss of stormwater runoff to the watershed would occur during the first 10 years of active mining, with a reduction in annual average runoff of about 30 to 40%, compared with undeveloped baseline conditions. Can you please provide us with the estimated percent reduction in flow at the Cienega/Davidson confluence during the active life of the mine? We can only find the estimates for post mine reduction in stormwater flow. Also, we would appreciate knowing if there are any documents that you are aware of that address this issue specifically.

Thanks much,

Rob

Robert A. Leidy, Ph.D.

Ecologist/Enforcement Officer

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